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## WHAT IS CLAIMED IS:

A software system for managing available to promise (ATP) and making promises to fulfill customer requests, the software system comprising:

a plurality of seller models representing sellers that sell at least one product, the seller models operable to forecast for at least one product and operable to choose commitment levels creating forecast requests;

the forecast requests receiving promises made by supplier sites to provide product allocation to the organization; and

the product allocation available to the sellers to promise to actual customer-rests;

wherein the plurality of seller models comprise a hierarchy that has an organization and one or more members such that product allocation to the organization can be used by the organization or promised to and used by the members; and

wherein the organization has a portion of the product allocation designated as first-come-Kirst-served product, the first-come-first-served product available for consumption by the members as needed to promise to actual customer requests.

2. The software system of Claim 1, wherein the organization further has a portion of the product

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allocation designated as retained product, the retained product under control of the organization and available for consumption by the organization or for promising to members.

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3. A software system for managing available to promise (ATP) and making promises to fulfill customer requests, the software system comprising:

a plurality of seller models representing sellers that sell at least one product, the seller models operable to forecast for at least one product and operable to choose commitment levels creating forecast requests;

the forecast requests receiving promises made by supplier sites to provide product allocation to the organization; and

the product allocations available to the sellers to promise to actual customer requests;

wherein the plurality of seller models comprise a hierarchy that has an organization and one or more members such that product allocation to the organization can be used by the organization or promised to and used by the members; and

wherein the organization has an ATP horizon defined at a greater granularity than the forecast, the ATP horizon having ATP entries representing an amount of product from the product allocation that is available during each forecast period.

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4. A software system for managing available to promise (ATP) and making promises to fulfill customer requests, the software system comprising:

a plurality of seller models representing sellers that sell at least one product, the seller models operable to forecast for the at least one product and operable to choose commitment levels creating forecast requests;

the forecast requests receiving promises made by supplier sites to provide product allocation to the organization; and

the product allocations available to the sellers to promise to actual customer requests;

wherein the plurality of seller models comprise a hierarchy that has an organization and one or more members such that product allocation to the organization can be used by the organization or promised to and used by the members; and

wherein the organization promises product to the members based upon an automatic allocation policy.

5. The software system of Claim 4, wherein the automatic allocation policy allows the organization to designate forecast entry of a member as a zero-ATP entry such that the available-to-promise product at the member is zero for that forecast entry.

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- 6. The software system of Claim 4, wherein the automatic allocation policy is an FCFS allocation policy.
- 7. The software system of Claim 4, wherein the automatic allocation policy is a per allocated allocation policy.
- 8. The software system of Claim 4, wherein the automatic allocation policy is a per committed allocation policy.
- 9. The software system of Claim 4, wherein the automatic allocation policy is a member rank allocation policy.
- 10. The software system of Claim 4, wherein the automatic allocation policy is a fixed split allocation policy.

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A software system for managing available to promise (ATP) and making promises to fulfill customer requests, the software system comprising:

a plurality of generic product models each representing a generic product, each generic product model specifying one component of a plurality of possible components;

a plurality of specific product models each representing a specific product, each specific product model specifying all components of the specific product;

wherein each component specified by each specific product model is specified by one of the generic product models, such that each specific product model is related to a subset of the generic product models; and

wherein a customer request matching a specific product can be fulfilled by available-to-promise of the specific product or by available-to-promise of all related generic products.

12. The software system of Claim 11, wherein the generic product models and specific product models are repeated across a seller hierarchy, such that, in addition to generic-specific relationships, there are organization-member relationships between generic products and between specific products.

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